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## (54) METHOD AND SYSTEM FOR COMPUTER BASED TESTING USING AN AMALGAMATED RESOURCE FILE

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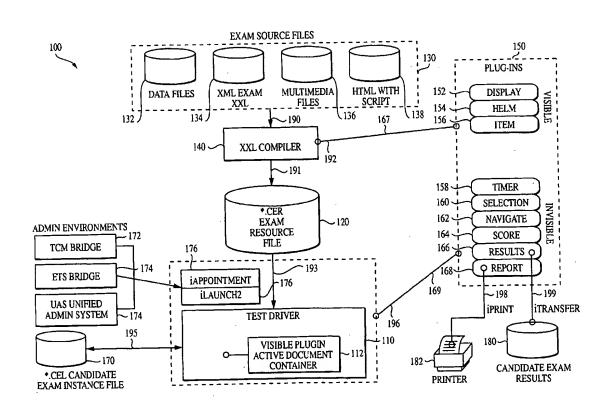
## **Publication Classification**

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## (57) ABSTRACT

A system for computer-based testing for producing a test and delivering the test to an examinee includes a storage device that has a first storage location, which stores a first segment of a test definition language, and a second storage location, which stores a second segment of the test definition language, a validation expansion module that validates the first segment and the second segment of the test definition language, a test packager that amalgamates the first storage location and the second storage location and transmits the amalgamated segment to the validation expansion module such that the validation expansion module can determine whether the amalgamated segment forms a complete and valid set, and a test driver that has an executable code that controls functionality that enables the test driver to deliver the test to an examinee. A method of computer-based testing includes validating a first segment of the test definition language, amalgamating the first segment and the second segment of the test definition language, validating an amalgamated segment, such that the amalgamated segment is valid if the amalgamated segment forms a complete and valid set, and amalgamating the first segment and the second segment of the test definition language during a test delivery cycle.





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#### ABSTRACT:

A system for computer-based testing for producing a test and delivering the test to an examinee includes a storage device that has a first storage location, which stores a first segment of a test definition language, and a second storage location, which stores a second segment of the test definition language, a validation expansion module that validates the first segment and the second segment of the test definition language, a test packager that amalgamates the first storage location and the second storage location and transmits the amalgamated segment to the validation expansion module such that the validation expansion module can determine whether the amalgamated segment forms a complete and valid set, and a test driver that has an executable code that controls functionality that enables the test driver to deliver the test to an examinee. A method of computer-based testing includes validating a first segment of the test definition language, amalgamating the first segment and the second segment of the test definition language, validating an amalgamated segment, such that the amalgamated segment is valid if the amalgamated segment forms a complete and valid set, and amalgamating the first segment and the second segment of the test definition language during a test delivery cycle.

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Detail Description Paragraph - DETX (21):

[0100] FIG. 5 illustrates the contents of exam source file 130, which are compiled into exam resource file 120 by XXL compiler 140 and plugins 150. FrontPage 2000 Web 200 is used, for example, to author the test. Exam source files 130 contain media files 210, visual files 220, and logic files 230. Media files 210 are multimedia files used to enhance the presentation of the test, including, for example, XML data files 212, sound files 214, image files 216, and binary files 218. XML data files 212 include the XXL test definition language and the XXL extensions from the plugins 150 that use XML. The test specification, presentation, scoring and other information is specified in the XML files. Sound files 214 include any sounds that are to be used during the test, such as .mp3 files, .au files, etc. Image files 216 include any images to be used during the test, such as .jpg files, .gif files, etc. Binary files 218 include any data needed by a plugin 150 that is not in XXL format. Visual files 220 are  $\underline{\text{HTML}}$  files that specify the visual presentation of the test as presented to the examine on the display device, including items files 222, presentation files 224, score report files 226, and custom look files 228. Items files 222 include HTML files that are used to specify the visual component of test questions, e.g., stems and distractors. Items files 222 are

capable also of referencing external exhibits. An exhibit could be a chart, diagram or photograph. Formats of exhibits include, for example: .jpg, .png, etc. Presentation files 224 define what is seen by the examinee on the display device at a particular instant during the test. Score report files 226 include is typically an HTML file with embedded script that includes, for example candidate demographics, appointment information, and candidate performance. The performance might include pass/fail, achievement in different content areas, etc. Custom look files 228 include are typically HTML files with embedded script to layout, for example, the title bar and information contained therein. Logic files 230 are XML files that specify the functional aspects of the test, including test specification files 232, plugin files 234, item bank files 236, and template files 238. Test specification files 232 specify the content and progression of the test as provided by the client. Plugin files 234 define plugins 150 and contain any data necessary to implement plugins 150. Item bank files 236 include the data content and properties of the items, or test questions, that are to be presented to the examinee during the test. Properties of an item include the correct answer for the item, the weight given to the item, etc. Template files 238 define visual layouts that are used with the display screen during the test.

### Claims Text - CLTX (16):

15. The system of claim 14: wherein the validation expansion module comprises a plug-in, wherein the first segment of the test definition language defines the plug-in, wherein the second segment of the test definition language defines an area in a template in which the plug-in is to be used, the template determining a visual presentation of the at least one test on the display device, and wherein the third segment of the test definition language defines a presentation in which the plug-in is to be used, the presentation determining the visual presentation of the at least one test on the display device at a particular instance during the at least one test.

## Claims Text - CLTX (19):

18. The system of claim 14: wherein the validation expansion module comprises a plug-in, the first segment of the test definition language defines the plug-in; wherein the second segment of the test definition language defines an area in a template in which the plug-in is to be used, the template determining a visual presentation of the at least one test on the display device, wherein the third segment of the test definition language defines an item, which includes at least one question delivered to the examinee during the at least one test, and wherein the similar feature defined by the first segment, the second segment, and the third segment of the test definition language is items.

## Claims Text - CLTX (28):

27. The system of claim 26, wherein the validation expansion module comprises a plug-in, wherein the first segment of the test definition language defines the plug-in, wherein the second segment of the test definition language defines an area in a template in which the plug-in is to be used, the template determining a visual presentation of the at least one test on the display device, and wherein the third segment of the test definition language defines a presentation in which the plug-in is to be used, the presentation determining the visual presentation of the at least one test on the display device at a particular instance during the at least one test.

## Claims Text - CLTX (31):

30. The system of claim 26: wherein the validation expansion module comprises a plug-in, wherein the first segment of the test definition language defines the plug-in, wherein the second segment of the test definition language defines an area in a template in which the plug-in is to be used, the template determining a visual presentation of the at least one <u>test on the display</u>

device wherein the third segment of the test definition language defines an item, which includes at least one question delivered to the examinee during the at least one test, and wherein the first segment, the second segment, and the third segment further comprise a same category of information, the same category of information comprising items.